AMENDMENTS TO THE CLAIMS

1.   (*Previously Presented*) An image decoding appratus, comprising:

an analyzer for analyzing, in a coded bit stream, intra-coded indicator information indicating whether all images in a moving picture sequence are intra coded, wherein the intra-coded indicator information is separate from information indicating whether each individual image is intra coded; and

a decoder for decoding images contained in the moving picture sequence in response to the intra-coded indicator information analyzed by said analyzer.

2.   (*Previously Presented*) The image decoding apparatus according to claim 1, wherein the moving picture sequence is a video object layer comprising moving image objects of given shapes.

3.   (*Previously Presented*) The image decoding apparatus according to claim 1, wherein the moving picture sequence is a video object plane group constituting a video object layer comprising moving image objects of given shapes.

4.   (*Previously Presented*) The image decoding apparatus according to claim 1, wherein said decoder selects the images in the moving picture sequence to decode through decimation in response to the intra-coded indicator information and decoding side display rate information.

5.   (*Previously Presented*) The image decoding apparatus according to claim 1,

wherein said analyzer

analyzes coding side display rate information included in the coded bit stream,

and

identifies images to be decoded in response to the coding side display rate

information and to decoding side display rate information, and

wherein said decoder selects the images contained in the moving picture

sequence to decode through decimation in response to the intra-coded indicator

information and display time information of images identified by said analyzer.

6.   (*Previously Presented*) The image decoding apparatus according to claim 1,

wherein said decoder decodes an image indicated by decoding side display time

information in response to the intra-coded indicator information.

7.   (*Previously Presented*) The image decoding apparatus according to claim 1,

wherein said analyzer

analyzes coding side display rate information and display time information of

images of the moving picture sequence, wherein both the coding side display rate

information and the display time information of the images are included in the coded bit

stream, and

identifies images to be decoded in response to the coding side display rate

information and the display time information of the images, and

wherein said decoder decodes the images designated by decoding side display time information in response to the intra-coded indicator information and to the display time information of the images identified by said analyzer to be decoded.

8.   (*Previously Presented*) The image decoding apparatus according to claim 1,

wherein said analyzer

analyzes display time multiplex identification information in the coded bit stream, when the intra-coded indicator information indicates that all images contained in the moving picture sequence are intra coded, wherein the display time multiplex identification information indicating whether display time information of all the images contained in the moving picture sequence are multiplexed or not, and

analyzes display time information of all the images contained in the moving picture sequence on a basis of each moving picture sequence when the display time multiplex identification information indicates that the display time information of all the images contained in the moving picture sequence is multiplexed, and

wherein said decoder decodes the images contained in the moving picture sequence in response to the intra-coded indicator information and the display time information.

9.   (*Previously Presented*) The image decoding apparatus according to claim 1, wherein said decoder decodes images indicated by decoding side display time information from among the images contained in the moving picture sequence in

response to the intra-coded indicator information, display time information and the decoding side display time information.

10.   (*Previously Presented*) An image decoding method, comprising the steps of:

analyzing, in a coded bit stream, intra-coded indicator information indicating whether all images in a moving picture sequence are intra coded, wherein the intra-coded indicator information is separate from information indicating whether each individual image is intra coded; and

decoding images contained in the moving picture sequence in response to the intra-coded indicator information analyzed by said analyzer.

11.   (*Previously Presented*) The image decoding method according to claim 10, wherein said decoding step includes selecting the images in the moving picture sequence to decode through decimation in response to the intra-coded indicator information and decoding side display rate information.

12.   (*Previously Presented*) The image decoding method according to claim 10,

wherein the analyzing step includes

analyzes coding side display rate information included in the coded bit stream, and

identifying display time information of images to be decoded based on the coding side display rate information and based on decoding side display rate information,

and wherein the decoding step includes selecting the images contained in the moving picture sequence to decode through decimation in response to the intra-coded indicator information and the display time information of the images identified in the analyzing step.

13.   (*Previously Presented*) The image decoding method according to claim 10, wherein the decoding step includes decoding images indicated by decoding side display time information in response to the intra-coded indicator information and the decoding side display time information.

14.   (*Previously Presented*) The image decoding method according to claim 10, wherein the analyzing step includes

analyzing coding side display rate information and display time information of the images of the moving picture sequence, wherein both the coding side display rate information and the display time information of the images are included in the coded bit stream, and

identifying images to be decoded in response to the coding side display rate information and the display time information of the images, and

wherein the decoding step includes decoding the images indicated by decoding side display time information in response to the intra-coded indicator information and to the display time information of the identified images to be decoded.

15.   (*Previously Presented*) The image decoding method according to claim 10,

wherein the analyzing step includes

analyzing, in the coded bit stream, display time multiplex identification

information when the intra-coded indicator information indicates that all images

contained in the moving picture sequence are intra coded, wherein the display time

multiplex identification information indicates whether display time information of all the

images contained in the moving picture sequence are multiplexed or not, and

analyzing the display time information of all the images contained in the moving

picture sequence on a basis of each moving picture sequence when the display time

multiplex identification information indicates that the display time information of all the

images contained in the moving picture sequence are multiplexed, and

wherein the decoding step includes decoding the images contained in the moving

picture sequence in response to the intra-coded indicator information and the display

time information.

16.   (*Previously Presented*) The image decoding method according to claim 10,

wherein the decoding step includes decoding images indicated by decoding side display

time information from among the images contained in the moving picture sequence in

response to the intra-coded indicator information, to display time information and to the

decoding side display time information.

17.   (*Previously Presented*) An image coding apparatus comprising:

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an encoder for coding images contained in a moving picture sequence in response to intra-coding instruction information indicating whether all the images contained in the moving picture sequence are to be intra coded; and

a multiplexer for multiplexing, into an image coded signal encoded by said encoder, intra-coded indicator information indicating whether all the images contained in the moving picture sequence are intra coded, wherein the intra-coded indicator information is separate from information indicating whether each individual image is intra coded.

18.   (*Previously Presented*) The image coding apparatus according to claim 17, wherein said multiplexer

multiplexes display time multiplex identification information for each moving picture sequence when the intra-coded indicator information indicates that all the images contained in the moving picture sequence are to be intra coded, wherein the display time multiplex identification information indicates whether display time information of all the images contained in the moving picture sequence are to be multiplexed or not, and

multiplexes display time information of all the images contained in the moving picture sequence for each moving picture sequence when the display time multiplex identification information indicates that the display time information of all the images contained in the moving picture sequence are to be multiplexed.

19.   (*Previously Presented*) An image coding method comprising the steps of:

encoding images contained in a moving picture sequence in response to intra-coding instruction information instructing whether all the images contained in the moving picture sequence are to be intra coded; and

multiplexing, into an encoded image coded signal, intra-coded indicator information indicating whether all the images contained in the moving picture sequence are intra coded, wherein the intra-coded indicator information is separate from information indicating whether each individual image is intra coded.

20.   (*Previously Presented*) The method according to claim 19, wherein said multiplexing step includes:

multiplexing display time multiplex identification information for each moving picture sequence when the intra-coded indicator information indicates that all the images contained in the moving picture sequence are to be intra coded, wherein the display time multiplex identification information indicates whether display time information of all the images contained in the moving picture sequence are to be multiplexed; and

multiplexing the display time information of all the images contained in the moving picture sequence for each moving picture sequence when the display time multiplex identification information indicates that the display time information of all the images contained in the moving picture sequence are to be multiplexed.

21-40. (Cancelled)

41.   *(Previously Presented)* A recording medium on which a moving picture sequence as a coded bit stream is recorded, the coded bit stream comprising:

an intra-code indicator within header information that indicates whether a plurality of video object planes (VOP) of a video object layer (VOL) are intra-coded, and wherein the intra-code indicator is separate from information indicating whether each individual VOP is intra-coded; and

VOP data of the VOPs of the VOL,

wherein the moving picture sequence includes one or more video object planes (VOPs), zero or more groups of VOP (GOV), one or more video object layers (VOL), and one or more video objects (VO),

wherein a hierarchy of the moving picture sequence is such that each VO includes one or more VOLs, each VOL includes zero or more GOVs and/or one or more VOPs, and each GOV includes one or more VOPs, and

wherein at least one VO describes an image object occupying less than an entire frame of display.

42.   *(Previously Presented)* The recording medium of claim 41, wherein the header information are VOL header information corresponding to the VOL and wherein the intra-coded indicator indicates whether all VOPs of the VOL are intra-coded.

43.   *(Previously Presented)* The recording medium of claim 42,

wherein the VOP data for each VOP include geometry coded data, texture coded data, motion information, and macroblock-based coding mode information,

wherein the geometry coded data for the VOP comprise a plurality of alpha blocks and the texture coded data comprise a plurality of macroblocks, and

wherein the motion information indicate motion vector information for each macroblock and the macroblock-based coding mode information indicate intra/inter coding of each macroblock.

44.   *(Previously Presented)* The recording medium of claim 43, wherein the coded bit stream further comprises VO header information for each VO, GOV header information for each GOV, and VOP header information for each VOP.

45.   *(Previously Presented)* The recording medium of claim 42, wherein a length of the intra-coded indicator is one bit.

46.   *(Previously Presented)* The recording medium of claim 41, wherein the header information are GOV header information of a GOV included in the VOL and wherein the intra-coded indicator indicates whether all VOPs of the GOV are intra-coded.

47.   *(Previously Presented)* The recording medium of claim 46,

wherein the VOP data for each VOP include geometry coded data, texture coded data, motion information, and macroblock-based coding mode information,

wherein the geometry coded data for the VOP comprise a plurality of alpha blocks and the texture coded data comprise a plurality of macroblocks, and

wherein the motion information indicate motion vector information for each macroblock and the macroblock-based coding mode information indicate intra/inter coding of each macroblock.

48.   *(Previously Presented)* The recording medium of claim 47, wherein said coded bit stream further comprises VO header information for each VO, VOL header information for each VOL, and VOP header information.

49.   *(Previously Presented)* An image decoding apparatus to decode a moving picture sequence encoded as a coded bit stream, comprising:

a header analyzer configured to analyzer header information of the coded stream, wherein the header information include an intra-code indicator that indicates whether a plurality of video object planes (VOP) of a video object layer (VOL) are intra-coded, and wherein the intra-code indicator is separate from information indicating whether each individual VOP is intra-coded; and

a decoder configured to decode VOP data of the VOPs of the VOL in the coded bit stream,

wherein the moving picture sequence includes one or more video object planes (VOPs), zero or more groups of VOP (GOV), one or more video object layers (VOL), and one or more video objects (VO),

wherein a hierarchy of the moving picture sequence is such that each VO includes one or more VOLs, each VOL includes zero or more GOVs and/or one or more VOPs, and each GOV includes one or more VOPs, and

wherein at least one VO describes an image object occupying less than an entire frame of display.

50.   *(Previously Presented)* The image decoding apparatus of claim 49, wherein the header information are VOL header information corresponding to the VOL and wherein the intra-coded indicator indicates whether all VOPs of the VOL are intra-coded.

51.   *(Previously Presented)* The image decoding apparatus of claim 50,

wherein the VOP data for each VOP include geometry coded data, texture coded data, motion information, and macroblock-based coding mode information,

wherein the geometry coded data for the VOP comprise a plurality of alpha blocks and the texture coded data comprise a plurality of macroblocks, and

wherein the motion information indicate motion vector information for each macroblock and the macroblock-based coding mode information indicate intra/inter coding of each macroblock.

52.   *(Previously Presented)* The image decoding apparatus of claim 51, wherein the

decoder comprises:

a video signal analyzer configured to analyze the VOP data of each VOP of the

VOL, and generate geometry coded data and texture coded data for each VOP based

on the VOP data;

a geometry decoder configured to generate decoded geometry data based on

the geometry coded data;

a texture decoder configured to generate decoded textured data based on the

texture coded data;

a decode INTRA/INTER decision section configured to output the decoded

textured data when the intra-coded indicator indicates that all VOPs of the VOL are

intra-coded.

53.   *(Previously Presented)* The image decoding apparatus of claim 52,

wherein said video signal analyzer is configured to generate macroblock-based

coding mode information based on the VOP data, wherein the macroblock-based

coding mode information indicate whether or not the texture coded data are intra-coded,

and

wherein said decode INTRA/INTER decision section is configured to output the

decoded textured data corresponding to the texture coded data when the macroblock-

based coding mode information indicate that the texture coded data are intra-coded.

54.   *(Previously Presented)* The image decoding apparatus of claim 53,

wherein said video signal analyzer is configured to generate motion information

of the VOP based on the VOP data,

wherein said image decoding apparatus further comprises a motion compensator

configured to generate decoded prediction texture data based on the motion

information, and

wherein said decode INTRA/INTER decision section is configured to generate a

sum of the decoded textured data and the decoded prediction texture data when the

intra-code indicator does not indicate that all VOPs of the VOL are intra-coded and the

macroblock-based coding mode information indicate the texture coded data are not

intra-coded.

55.   *(Previously Presented)* The image decoding apparatus of claim 53, wherein said

header analyzer is configured to recognize a reference time code multiplexed into the

GOV header information of the GOVs of the VOL.

56.   *(Previously Presented)* The image decoding apparatus of claim 55, wherein said

header analyzer is configured to perform the following for each VOP based on the

corresponding VOP header information:

determine a modulo-time base of the VOP,

determine a VOP time increment of the VOP,

determine a decoded VOP absolute display time indicating an absolute display

time of the VOP based on the modulo-time base of the VOP, the VOP time increment of

the VOP, and the reference time code,

determine whether the VOP is to be decoded or is to be skipped,

analyze video information headers of the VOP when it is determined that the

VOP is to be decoded, and

skip the VOP from display when it is determined that the VOP is to be skipped.

57.   *(Previously Presented)* The image decoding apparatus of claim 56, wherein said

VOP header analyzer is configured to determine that the VOP is to be decoded when

one of the following is true:

the intra-coded indicator indicates that all VOPs of the VOL are intra-coded, and

the intra-coded indicator does not indicate that all VOPs of the VOL are intra-

coded and the decoded VOP absolute display time of the VOP coincides with a

decoding side display time.

58.   *(Previously Presented)* The image decoding apparatus of claim 57, wherein said

VOP header analyzer is configured to determine that the decoded VOP absolute display

time of the VOP coincides with the decoding side display time based on a decoding side

VOP display rate.

59.   *(Previously Presented)* The image decoding apparatus of claim 50, wherein the

length of the intra-coded indicator is one bit.

60.   *(Previously Presented)* The image decoding apparatus of claim 49, wherein the

header information are GOV header information corresponding to a GOV of the VOL

and wherein the intra-coded indicator indicates whether all VOPs of the GOV are intra-

coded.

61.   *(Previously Presented)* The image decoding apparatus of claim 60,

        wherein the VOP data for each VOP include geometry coded data, texture coded

data, motion information, and macroblock-based coding mode information,

        wherein the geometry coded data for the VOP comprise a plurality of alpha

blocks and the texture coded data comprise a plurality of macroblocks, and

        wherein the motion information indicate motion vector information for each

macroblock and the macroblock-based coding mode information indicate intra/inter

coding of each macroblock.

62.   *(Previously Presented)* The image decoding apparatus of claim 61, wherein the

decoder comprises:

        a video signal analyzer configured to analyze the VOP data of each VOP of the

GOV, and generate geometry coded data and texture coded data for each VOP based

on the VOP data;

a geometry decoder configured to generate decoded geometry data based on the geometry coded data;

a texture decoder configured to generate decoded textured data based on the texture coded data;

a decode INTRA/INTER decision section configured to output the decoded textured data when the intra-coded indicator indicates that all VOPs of the GOV are intra-coded.

63.   *(Previously Presented)* The image decoding apparatus of claim 62,

wherein said video signal analyzer is configured to generate macroblock-based coding mode information based on the VOP data, wherein the macroblock-based coding mode information indicate whether or not the texture coded data are intra-coded, and

wherein said decode INTRA/INTER decision section is configured to output the decoded textured data corresponding to the texture coded data when the macroblock-based coding mode information indicate that the texture coded data are intra-coded.

64.   *(Previously Presented)* The image decoding apparatus of claim 63,

wherein said video signal analyzer is configured to generate motion information of the VOP based on the VOP data,

wherein said image decoding apparatus further comprises a motion compensator configured to generate decoded prediction texture data based on the motion information from said video signal analyzer, and

wherein said decode INTRA/INTER decision section is configured to generate a sum of the decoded textured data and the decoded prediction texture data when the intra-code indicator does not indicate that all VOPs of the GOV are intra-coded and the macroblock-based coding mode information indicate the texture coded data are not intra-coded.

65.   *(Previously Presented)* The image decoding apparatus of claim 63, wherein said header analyzer is further configured to recognize a reference time code multiplexed into the GOV header information.

66.   *(Previously Presented)* The image decoding apparatus of claim 65, wherein VOP header analyzer is configured to perform the following for each VOP based on the corresponding VOP header information:

determine a modulo-time base of the VOP,

determine a VOP time increment of the VOP,

determine a decoded VOP absolute display time indicating an absolute display time of the VOP based on the modulo-time base of the VOP, the VOP time increment of the VOP, and the reference time code,

determine whether the VOP is to be decoded or is to be skipped,

analyze video information headers of the VOP when it is determined that the

VOP is to be decoded, and

skip the VOP from display when it is determined that the VOP is to be skipped.

67.   *(Previously Presented)* The image decoding apparatus of claim 66, wherein said

VOP header analyzer is configured to determine that the VOP is to be decoded when

one of the following is true:

the intra-coded indicator indicates that all VOPs of the GOV are intra-coded, and

the intra-coded indicator does not indicate that all VOPs of the GOV are intra-

coded and the decoded VOP absolute display time of the VOP coincides with a

decoding side display time.

68.   *(Previously Presented)* The image decoding apparatus of claim 67, wherein said

VOP header analyzer is configured to determine that the decoded VOP absolute display

time of the VOP coincides with the decoding side display time based on a decoding side

VOP display rate.

69.   *(Previously Presented)* An image decoding method to decode a moving picture

sequence encoded as a coded bit stream, comprising:

analyzing header information of the coded stream, wherein the header

information include an intra-code indicator that indicates whether a plurality of video

object planes (VOP) of a video object layer (VOL) are intra-coded, and wherein the

intra-code indicator is separate from information indicating whether each individual VOP

is intra-coded; and

decoding VOP data of the VOPs of the VOL in the coded bit stream,

wherein the moving picture sequence includes one or more video object planes

(VOPs), zero or more groups of VOP (GOV), one or more video object layers (VOL),

and one or more video objects (VO),

wherein a hierarchy of the moving picture sequence is such that each VO

includes one or more VOLs, each VOL includes zero or more GOVs and/or one or more

VOPs, and each GOV includes one or more VOPs, and

wherein at least one VO describes an image object occupying less than an entire

frame of display.

70.   *(Previously Presented)* The image decoding method of claim 69, wherein the

header information are VOL header information corresponding to the VOL and wherein

the intra-coded indicator indicates whether all VOPs of the VOL are intra-coded.

71.   *(Previously Presented)* The image decoding method of claim 70,

wherein the VOP data for each VOP include geometry coded data, texture coded

data, motion information, and macroblock-based coding mode information,

wherein the geometry coded data for the VOP comprise a plurality of alpha

blocks and the texture coded data comprise a plurality of macroblocks, and

wherein the motion information indicate motion vector information for each macroblock and the macroblock-based coding mode information indicate intra/inter coding of each macroblock.

72.   *(Previously Presented)* The image decoding method of claim 71, wherein said decoding step comprises:

analyzing the VOP data of each VOP of the corresponding VOL, and generating geometry coded data and texture coded data for each VOP based on the VOP data;

generating decoded geometry data based on the geometry coded data;

generating decoded textured data based on the texture coded data;

outputting the decoded textured data when the intra-coded indicator indicates that all VOPs of the VOL are intra-coded.

73.   *(Previously Presented)* The image decoding method of claim 72,

wherein said decoding step further comprises generating macroblock-based coding mode information based on the VOP data, wherein the macroblock-based coding mode information indicate whether or not the texture coded data are intra-coded, and

wherein said outputting step further comprises outputting the decoded textured data corresponding to the texture coded data when the macroblock-based coding mode information indicate that the texture coded data are intra-coded.

74.   *(Previously Presented)* The image decoding method of claim 73, wherein said decoding step further comprises:

    generating decoded prediction texture data based on the motion information; and

    generating a sum of the decoded textured data and the decoded prediction texture data when the intra-code indicator does not indicate that all VOPs of the VOL are intra-coded and the macroblock-based coding mode information indicate the texture coded data are not intra-coded.

75.   *(Previously Presented)* The image decoding method of claim 73, wherein said decoding step further comprises recognizing a reference time code multiplexed into at least one GOV header information.

76.   *(Previously Presented)* The image decoding method of claim 75, wherein said decoding step further comprises analyzing VOP header information for each VOP of the VOL, wherein the step of analyzing the VOP header information comprises:

    determining a modulo-time base of the VOP;

    determining a VOP time increment of the VOP;

    determining a decoded VOP absolute display time indicating an absolute display time of the VOP based on the modulo-time base of the VOP, the VOP time increment of the VOP, and the reference time code;

    determining whether the VOP is to be decoded or is to be skipped,

analyzing video information headers of the VOP when it is determined that the

VOP is to be decoded; and

skipping the VOP from display when it is determined that the VOP is to be

skipped.

77.   *(Previously Presented)* The image decoding method of claim 76, wherein said

step of determining whether the VOP is to be decoded or skipped includes:

determining that the VOP is to be intra-coded when the intra-coded indicator

indicates that all VOPs of the VOL are intra-coded; and

determining that the VOP is to be intra-coded when the intra-coded indicator

does not indicate that all VOPs of the VOL are intra-coded and the decoded VOP

absolute display time of the VOP coincides with a decoding side display time.

78.   *(Previously Presented)* The image decoding method of claim 77, wherein said

decoding step further comprises determining that the decoded VOP absolute display

time of the VOP coincides with the decoding side display time based on a decoding side

VOP display rate.

79.   *(Previously Presented)* The image decoding method of claim 70, wherein the

length of the intra-coded indicator is one bit.

80.   *(Previously Presented)* The image decoding method of claim 69, wherein the header information are GOV header information corresponding to a GOV of the VOL and wherein the intra-coded indicator indicates whether all VOPs of the GOV are intra-coded.

81.   *(Previously Presented)* The image decoding method of claim 80,

wherein the VOP data for each VOP include geometry coded data, texture coded data, motion information, and macroblock-based coding mode information,

wherein the geometry coded data for the VOP comprise a plurality of alpha blocks and the texture coded data comprise a plurality of macroblocks, and

wherein the motion information indicate motion vector information for each macroblock and the macroblock-based coding mode information indicate intra/inter coding of each macroblock.

82.   *(Previously Presented)* The image decoding method of claim 81, wherein said decoding step comprises:

analyzing the VOP data of each VOP of the corresponding GOV, and generate geometry coded data and texture coded data for each VOP based on the VOP data;

generating decoded geometry data based on the geometry coded data;

generating decoded textured data based on the texture coded data;

outputting the decoded textured data when the intra-coded indicator indicates that all VOPs of the GOV are intra-coded.

83.   *(Previously Presented)* The image decoding method of claim 82,

wherein said decoding step further comprises generating macroblock-based coding mode information based on the VOP data, wherein the macroblock-based coding mode information indicate whether or not the texture coded data are intra-coded, and

wherein said outputting step further comprises outputting the decoded textured data corresponding to the texture coded data when the macroblock-based coding mode information indicate that the texture coded data are intra-coded.

84.   *(Previously Presented)* The image decoding method of claim 83, wherein said decoding step further comprises:

generating decoded prediction texture data based on the motion information from said video signal analyzer; and

generating a sum of the decoded textured data and the decoded prediction texture data when the intra-code indicator does not indicate that all VOPs of the GOV are intra-coded and the macroblock-based coding mode information indicate the texture coded data are not intra-coded.

85.   *(Previously Presented)* The image decoding method of claim 83, wherein said decoding step further comprises recognizing a reference time code multiplexed into the GOV header information.

86.   *(Previously Presented)* The image decoding method of claim 85, wherein said

decoding step further comprises analyzing VOP header information for each VOP of the

GOV, wherein the step of analyzing the VOP header information comprises:

determining a modulo-time base of the VOP;

determining a VOP time increment of the VOP;

determining a decoded VOP absolute display time indicating an absolute display

time of the VOP based on the modulo-time base of the VOP, the VOP time increment of

the VOP, and the reference time code;

determining whether the VOP is to be decoded or is to be skipped,

analyzing video information headers of the VOP when it is determined that the

VOP is to be decoded; and

skipping the VOP from display when it is determined that the VOP is to be

skipped.

87.   *(Previously Presented)* The image decoding method of claim 86, wherein said

step of determining whether the VOP is to be decoded or skipped includes:

determining that the VOP is to be intra-coded when the intra-coded indicator

indicates that all VOPs of the GOV are intra-coded; and

determining that the VOP is to be intra-coded when the intra-coded indicator

does not indicate that all VOPs of the GOV are intra-coded and the decoded VOP

absolute display time of the VOP coincides with a decoding side display time.

88.   *(Previously Presented)* The image decoding method of claim 87, wherein said decoding step further comprises determining that the decoded VOP absolute display time of the VOP coincides with the decoding side display time based on a decoding side VOP display rate and the decoded VOP absolute display time of the VOP.

89-106. (Cancelled)

107.   *(Previously Presented)* The recording medium of claim 42, wherein the coded bit stream further comprises a VOP display time multiplexed indicator multiplexed into the VOL header information when intra-coded indicator indicates that all VOPs of the VOL are intra-coded, wherein the VOP display time multiplexed indicator indicates whether or not a VOP display times of all VOPs of the VOL are included in the coded bit stream.

108.   *(Previously Presented)* The recording medium of claim 107, wherein the coded bit stream further comprises the VOP display time information for each VOP in the VOL header information when the VOP display time multiplexed indicator indicates that the VOP display times of all VOPs of the VOL are included in the coded bit stream.

109.   *(Previously Presented)* The recording medium of claim 42, wherein the coded bit stream further comprises a VOP display time multiplexed indicator multiplexed into the GOV header information of the GOV of the VOL when intra-coded indicator indicates

that all VOPs of the VOL are intra-coded, wherein the VOP display time multiplexed

indicator indicates whether or not a VOP display times of all VOPs of the GOV are

included in the coded bit stream.

110. *(Previously Presented)* The recording medium of claim 106, wherein the coded

bit stream further comprises the VOP display time information for each VOP in the GOV

header information when the VOP display time multiplexed indicator indicates that the

VOP display times of all VOPs of the GOV are included in the coded bit stream.

111. *(Previously Presented)* The recording medium of claim 46, wherein the coded bit

stream further comprises a VOP display time multiplexed indicator multiplexed into the

GOV header information when intra-coded indicator indicates that all VOPs of the GOV

are intra-coded, wherein the VOP display time multiplexed indicator indicates whether

or not a VOP display times of all VOPs of the GOV are included in the coded bit stream.

112. *(Previously Presented)* The recording medium of claim 111, wherein the coded

bit stream further comprises the VOP display time information for each VOP in the GOV

header information when the VOP display time multiplexed indicator indicates that the

VOP display times of all VOPs of the GOV are included in the coded bit stream.

113. *(Previously Presented)* The image decoding apparatus of claim 50, wherein said

header analyzer is configured to recognize a VOP display time multiplexed indicator in

the VOL header information when the intra-code indicator indicates that all VOPs of the VOL are intra-coded, and wherein the VOP display time multiplexed indicator indicates whether or not a VOP display time information for each VOP of the VOL are included in the coded bit stream.

114. *(Previously Presented)* The image decoding apparatus of claim 113, wherein said header analyzer is configured to analyze VOP display time information for each VOP in the VOL header information when the VOP display time multiplexed instruction signal indicates that the VOP display time of all VOPs of the VOL are included in the coded bit stream.

115. *(Previously Presented)* The image decoding apparatus of claim 114, wherein said header analyzer is configured to perform random access based on the VOP display time information of the VOPs of the VOL and an externally set time code.

116. *(Previously Presented)* The image decoding apparatus of claim 50, wherein said header analyzer is configured to recognize a VOP display time multiplexed indicator in a GOV header information of a GOV of the VOL when the intra-code indicator indicates that all VOPs of the VOL are intra-coded, and wherein the VOP display time multiplexed indicator indicates whether or not a VOP display time information for each VOP of the GOV are included in the coded bit stream.

117. *(Previously Presented)* The image decoding apparatus of claim 116, wherein said header analyzer is configured to analyze VOP display time information for each VOP in the GOV header information when the VOP display time multiplexed instruction signal indicates that the VOP display time of all VOPs of the GOV of the VOL are included in the coded bit stream.

118. *(Previously Presented)* The image decoding apparatus of claim 117, wherein said header analyzer is configured to perform random access based on the VOP display time information of the VOPs of the GOV of the VOL and an externally set time code.

119. *(Previously Presented)* The image decoding apparatus of claim 60, wherein said header analyzer is configured to recognize a VOP display time multiplexed indicator in the GOV header information when the intra-code indicator indicates that all VOPs of the GOV are intra-coded, and wherein the VOP display time multiplexed indicator indicates whether or not a VOP display time information for each VOP of the GOV are included in the coded bit stream.

120. *(Previously Presented)* The image decoding apparatus of claim 119, wherein said header analyzer is configured to analyze VOP display time information for each VOP in the GOV header information when the VOP display time multiplexed instruction signal indicates that the VOP display time of all VOPs of the GOV are included in the coded bit stream.

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121. *(Previously Presented)* The image decoding apparatus of claim 120, wherein said header analyzer is configured to perform random access based on the VOP display time information of the VOPs of the GOV and an externally set time code.

122. *(Previously Presented)* The image decoding method of claim 70, further comprising recognizing a VOP display time multiplexed indicator in the VOL header information when the intra-code indicator indicates that all VOPs of the VOL are intra-coded, wherein the VOP display time multiplexed indicator indicates whether or not a VOP display time information for each VOP of the VOL are included in the coded bit stream.

123. *(Previously Presented)* The image decoding method of claim 122, further comprising analyzing VOP display time information for each VOP in the VOL header information when the VOP display time multiplexed instruction signal indicates that the VOP display time of all VOPs of the VOL are included in the coded bit stream.

124. *(Previously Presented)* The image decoding method of claim 123, further comprising performing random access based on the VOP display time information of the VOPs of the VOL and an externally set time code.

125.   *(Previously Presented)* The image decoding method of claim 70, further

comprising recognizing a VOP display time multiplexed indicator in a GOV header

information of a GOV of the VOL when the intra-code indicator indicates that all VOPs

of the VOL are intra-coded, and wherein the VOP display time multiplexed indicator

indicates whether or not a VOP display time information for each VOP of the GOV are

included in the coded bit stream.

126.   *(Previously Presented)* The image decoding method of claim 125, further

comprising analyzing VOP display time information for each VOP in the GOV header

information when the VOP display time multiplexed instruction signal indicates that the

VOP display time of all VOPs of the GOV of the VOL are included in the coded bit

stream.

127.   *(Previously Presented)* The image decoding method of claim 126, further

comprising performing random access based on the VOP display time information of the

VOPs of the GOV of the VOL and an externally set time code.

128.   *(Previously Presented)* The image decoding method of claim 80, further

comprising recognizing a VOP display time multiplexed indicator in the GOV header

information when the intra-code indicator indicates that all VOPs of the GOV are intra-

coded, and wherein the VOP display time multiplexed indicator indicates whether or not

a VOP display time information for each VOP of the GOV are included in the coded bit stream.

129.   *(Previously Presented)* The image decoding method of claim 128, further comprising analyzing VOP display time information for each VOP in the GOV header information when the VOP display time multiplexed instruction signal indicates that the VOP display time of all VOPs of the GOV are included in the coded bit stream.

130.   *(Previously Presented)* The image decoding method of claim 129, further comprising performing random access based on the VOP display time information of the VOPs of the GOV and an externally set time code.

131.   *(Previously Presented)* The image decoding apparatus for receiving a coded bit stream including an intra-coded indicator information in a code word, the intra-coded indicator information indicating whether all VOPs of a moving picture sequence of a VOL are intra-coded into header information of the moving picture sequence of the VOL made up of a plurality of VOPs,

the image decoding apparatus comprising a header analyzer configured to analyze the header information of the moving picture sequence of the VOL,

wherein the image decoding apparatus is configured to recognize that one or more VOPs in the VOL are randomly accessible when the intra-coded indicator

information output from the header analyzer indicates that all the VOPs in the VOL are

intra-coded.

132.   *(Previously Presented)* The image decoding apparatus according to claim 131,

wherein the coded word includes VOP rate information indicating a number of VOP

display planes per unit time of the VOP forming the moving picture sequence, in the

header information of the moving picture sequence of the VOL,

wherein the header analyzer comprises a VOP rate information analyzer for

analyzing the VOP rate information, and

wherein the image decoding apparatus is configured to recognize that time

information of the one or more VOPs in the VOL are randomly accessible based on the

VOP rate information when the intra-coded indicator information output from the header

analyzer indicates all the VOPs of the VOL are intra-coded.